L 4489-66

ACC NR: AP5024660

tween passage of the particle and application of the field. The direction of the spark agrees with that of the track within 1° even when the angle between the track and the electric field is as large as 40-50°. The shower efficiency of a spark chamber with a 10 cm gap has been found to be 100 % for showers of up to 200 particle tracks making angles less than 20° with the electric field, and under certain conditions it is possible to distinguish tracks of heavily ionizing particles against a background of minimum ionizing particle tracks. It is possible to increase the delay between particle passage and field application up to 20 microsec without reducing the recording efficiency for single particles below 100 %, but the quality of the track deteriorates when the delay exceeds 2 microsec. In the streamer chamber the duration of the high voltage pulse is nicely controlled so that streamer development begins but the spark discharge stage is not reached. It is thus possible to record narrow tracks for particles moving in an arbitrary direction with respect to the electric field. The streamer chamber appears to be the best of all track chambers for accurate determinations of track directions and curvatures. Orig. art. has: 5 figures.

SUB CODE: NP/ SUBM DATE: 00/ ORIG REF: 008/ OTH REF: 007

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L 14851-65 EWT(1)/EWT(m)/EEC(t)/EWP(t)/EWP(b) Peb IJP(c)/AEDC(a)/SSD/
AFWL/AS(mp)-2/ESD(gs)/ESD(t) JD
ACCESSION NR: AP4048424 S/0181/64/006/011/3435/3437

AUTHORS: Belov, V. F.; Devisheva, M. N.; Zheludev, I. S.; Makarov, Ye. F.; Stukan, R. A.; Trukhtanov, V. A.

TITLE: Mossbauer effect in manganese and manganese-magnesium ferrites

SOURCE: Fizika tverdogo tela, v. 6, no. 11, 1964, 3435-3437

TOPIC TAGS: manganese alloy, magnesium ferrite, Mossbauer effect, saturation magnetization, internal magnetic field

ABSTRACT: The purpose of this study was to obtain information on the properties of the internal magnetic fields at the Fe^{57} in the ferrites and to obtain other data on the Mossbauer effect in solid solutions of ferrites with spinel structure and with different Mn atom contents. The absorbers used were ferrites in powdered form, mixed with paraffin and pressed into tablets of 10 cm^2 area (surface

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density of iron 10 mg/cm^2). The source was a stainless steel plate impregnated with Co^{57} radioactive nuclei. The internal magnetic field was determined by measuring the distance between the components of the Zeeman splitting. The results showed that the density of the s electrons (determined from the chemical shift) in the nucleus and in the investigated compounds is practically the same. The local magnetic field on the Fe nuclei decreased with increasing saturation magnetization in some ferrites and increased in others, and an explanation is offered for this difference. Orig. art. has: 3 tables.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics AN SSSR); Institut kristallografii AN SSSR, Moscow (Institute of Crystallography AN SSSR)

SUBMITTED: 09Jun64 ENCL: 00
SUB CODE: SS, MM NR REF SOV: 003 OTHER: 005

L 58456-65 EWT(1) Pab IJAAP/LIP(c) 27
ACCESSION NR: AP5013669 21 B UR/0386/65/001/001/0031/0036

AUTHOR: Gol'danskiy, V. I.; Trukhtanov, V. A.; Devisheva, M. M.; Belov, V. F.

TITLE: Super-exchange induction of magnetic fields at the nuclei of nonmagnetic atoms

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 1, no. 1, 1965, 31-36.

TOPIC TAGS: Mossbauer effect, tin, yttrium iron garnet, exchange induction, Gamma resonance

ABSTRACT: The authors report the experimental observation of indirect exchange induction of magnetic fields at nuclei of nonmagnetic Sn^{119} atoms introduced into an iron-garnet structure with general chemical formula $Y_{3-x}Ca_xSn_xFe_{5-x}O_{12}$. The ferrite was prepared by the usual technique of sintering the component oxides. Investigations with the aid of nuclear gamma resonance (Mossbauer effect) yield, for example for a sample with x = 0.15, a distinct hyperfine magnetic splitting of the ground and first excited states of the Sn^{119} nuclei. The interaction between the

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Sn ions and the magnetic iron ions is apparently produced by the mechanism of indirect exchange via the oxygen ions, and such an indirect exchange induces at the tin nuclei rather large magnetic fields, exceeding 200 kOe at t = -196C. The fact that there is no chemical shift of the center of gravity of the spectrum relative to the $Sn^{119}O_2$ source is evidence against the direct interaction of the tin and iron atoms. The gamma-resonance spectrum for iron (obtained with a Co^{57} source in chromium) has a fine structure typical of the two sublattices of yttrium iron garnet, with two values of magnetic fields at the iron. With increasing temperature the magnetic field at the Sn^{119} nuclei decreased simultaneously with the decreasing field at the Fe^{57} nuclei and disappeared completely when the iron ions went over into the paramagnetic state. The conductivity was quite small and increased with increasing temperature, whereas the magnetic field on the iron and tin nuclei increased at the same time. The magnetic moment of the first excited state of Sn^{119}, calculated from the obtained nuclear gamma-resonance spectra, is 0.67 ± 0.01 nuc. magnetons. "The authors are grateful to Yu. M. Kagan for a very useful discussion, to Ye. F. Makarov for help with the work, to S. S. Kurochkin for the use of the 2048-channel analyzer, and to Ye. L. Frankevich for help with measuring the conductivity of the samples. Orig. art. has: 2 figures.

Sn ions and the magnetic iron ions is apparently produced by the mechanism of indirect exchange via the oxygen ions, and such an indirect exchange induces at the tin nuclei rather large magnetic fields, exceeding 200 kOe at t = -196C. The fact that there is no chemical shift of the center of gravity of the spectrum relative to the $Sn^{119}O_2$ source is evidence against the direct interaction of the tin and iron atoms. The gamma-resonance spectrum for iron (obtained with a Co^{57} source in chromium) has a fine structure typical of the two sublattices of yttrium iron garnet, with two values of magnetic fields at the iron. With increasing temperature the magnetic field at the Sn^{119} nuclei decreased simultaneously with the decreasing field at the Fe^{57} nuclei and disappeared completely when the iron ions went over into the paramagnetic state. The conductivity was quite small and increased with increasing temperature, whereas the magnetic field on the iron and tin nuclei increased at the same time. The magnetic moment of the first excited state of Sn^{119}, calculated from the obtained nuclear gamma-resonance spectra, is 0.67 ± 0.01 nuc. magnetons. "The authors are grateful to Yu. M. Kagan for a very useful discussion, to Ye. F. Makarov for help with the work, to S. S. Kurochkin for the use of the 2048-channel analyzer, and to Ye. L. Frankevich for help with measuring the conductivity of the samples. Orig. art. has: 2 figures.

L 58456-65
ACCESSION NR: AP5013669

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences, SSSR)

SUBMITTED: 15Feb65 ENCL: 00 SUB CODE: SS, NP

NR REF SOV: 001 OTHER: 006

Card 3/3

GOL'DANSKIY, V.I.; BELOV, V.F.; DEVISHEVA, M.N.; TRUKHTANOV, V.A.

Use of the nuclear gamma-resonance method in studying internal magnetic fields on Fe^{57} nuclei in Ni - Zn ferrites. Zhur.eksp. i teor.fiz. 49 no.6:1681-1688 D '65.

(MIRA 19:1)

1. Institut khimicheskoy fiziki AN SSSR. Submitted May 25, 1965.

L 36229-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6024517 SOURCE CODE: UR/0386/66/004/002/0063/0064

AUTHOR: Gol'danskiy, V. I.; Devisheva, M. N.; Makarov, Ye. F.; Novikov, G. V.; Trukhtanov, V. A.

ORG: Institute of Chemical Physics, Academy of Sciences SSSR (Institut khimicheskoy fiziki Akademii nauk SSSR)

TITLE: Sign of the magnetic field at tin nuclei in a ferrodielectric matrix

SOURCE: Zh eksper i teor fiz. Pis'ma v redaktsiyu. Prilozheniye, v. 4, no. 2, 1966, 63-64

TOPIC TAGS: tin, ferrite, Mossbauer spectrum, spectral distribution, magnetic moment, line splitting

ABSTRACT: The purpose of the investigation was to determine the sign of the indirectly induced (super-exchange) field at the nuclei of nonmagnetic tin atoms introduced into an yttrium-iron-garnet matrix, previously observed by the authors (Pis'ma ZhETF v. 1, no. 1, 1965; Phys. Lett. v. 15, no. 4, 1965). To this end the authors investigated the Mossbauer spectra of the same garnet sample placed in an external magnetic field. The change in the intesity ratios of the various spectral components, due to application of the magnetic field, is attributed to the change in the character of the angular distribution of the components of the transitions ± 1/2 (4/2) → ± 1/2 (1/2). The distinctly observed increase in the splitting of the Mossbauer spectrum components indicates that the internal magnetic field at the tin nuclei co-

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incides in direction with the applied electric field, with the magnetic moment of the tetrahedral sublattice parallel and that of the octahedral sublattice antiparallel to the applied field. Since the internal magnetic field at the iron nucleus is always negative relative to the magnetic moment of its ion, it is concluded that the fields of the nuclei, both tin and iron, situated in the same (octahedral) sublattice of the yttrium iron garnet have the same sign. Several explanations of this fact will be discussed in a future article. The authors thank Yu. S. Sherbinin for making possible the operation of the apparatus and Yu. P. Baydorovtsev for supplying the magnet.
Orig. art. has: 1 figure.

SUB CODE: 20/ SUBM DATE: 20May66/ ORIG REF: 002/ OTH REF: 002

L 07447-67 EWT(1) SCTB DD

ACC NR: AP6035874 SOURCE CODE: UR/0413/66/000/020/0095/0095

INVENTOR: Ratov, I. P.; Devishvili, V. M.

ORG: none

TITLE: A device for recording the dynamics of individual and group activity. Class 30, No. 187211 [announced by the Central Scientific Research Institute of Physical Culture (Tsentral'nyy nauchno-issledovatel'skiy institut fizkul'tury)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 95

TOPIC TAGS: bioinstrumentation, bioastronautics group dynamics, group activity

ABSTRACT: An Author Certificate has been issued for a device for recording the dynamics of individual and group activity consisting of a multichannel recorder and strain gauge amplifiers and rectifiers, and equipped with a cathode-ray tube for multicoordinate representation of the complex interaction between the programming mechanism and the subjects' responses. The device also has a multicoordinate displacement transducer for recording the small and continuously variable response reactions of subjects. A voltage divider is provided for recording distinct reactions of individual subjects. In order to obtain various program signals in different coordinates, the instrument has a multiple-channel tape recorder. It also has a still or movie camera with synchronized shutter and a step-by-step selector for testing on a single program.

SUB CODE: 06, 14/ SUBM DATE: 08Jun64/ ATD PRESS: 5104

Card 1/2 UDC: 612.77.[illegible]-07:621.[illegible]

DEVISON, B. M.

Universion of the unicity-theorem. matem. SB., 38:1-2 (1931), 45-47.
O primenenii metoda gaussa priblizhennogo vychisleniya opredelennykh integralov.
L., Zap. gidrol in-ta, 13 (1934), 141-158.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A. G.,
Markushevich, A. I.,
Rashevskiy, P. K.
Moscow-Leningrad, 1948

KHRISTIANOVICH, S. A.; MIKHLIN, S. G.; DEVISON, V. V.
DEVISON, V. V.

Nekotorye Novye Voprosy Mekhaniki Sploshnoy Sredy (Some New Problems of the Mechanics of a Continucus Medium), 1938.

KUZNETSOV, Ye.V.; DEVITAYEVA, R.S.

Phosphorylation of polyethylene. Trudy KKHTI no.30:63-69 '62.
(MIRA 16:10)

49-3-16/16

AUTHORS: Belokopytov, M.M., Devitsin, V.M. and Lapin , M.I.

TITLE: All Union Inter-Departmental Conference on aerial photography. (Vsesoyuznoye mezhduvedomstvennoye soveshchaniye po aeros"emke).

PERIODICAL: "Izvestiya Akademii Nauk, Seriya Geofizicheskaya" (Bulletin of the Ac.Sc., Geophysics Series), 1957, No.3, pp.415-416 (U.S.S.R.)

ABSTRACT: This conference was convened by the Aerial Methods Laboratory, Ac.Sc., U.S.S.R. (Laboratoriya Aerometodov Akademii Nauk SSSR) and was held between November 25 and December 1, 1956 in Leningrad. Numerous organisations of the Ac.Sc., Ministries and Departments participated. Ninety papers were discussed, twenty of which related to aerogeophysics. There were plenary meetings and sectional meetings on a number of subjects. The papers on aerial photography and aerophotogrammetry were presented at the plenary meetings, these included the following: "Aerogeophysical methods and the position relating to improving their effectiveness in geological sounding and prospecting work" by A. A. Logachev (LGI); "Tentative plan for aeromagnetic prospecting and geological prospecting work between 1956 and 1960 and further improvement and development of the aeromagnetic method" by V.Ye Nikitskiy

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All Union Inter-Departmental Conference on aerial photography.(Cont.)

(Glavgeofizika); "Present state and further development of aerogeophysical methods in the oil industry" by V. L. Sokolov (VNIIGeofizika). V.Ye. Nikitskiy and V. L. Sokolov stated that at present about 12 000 000 km^2 have been dealt with by aeromagnetic methods and during the present Five Year Plan period aeromagnetic mapping of the entire mainland of the U.S.S.R. at a scale of 1:1 000 000 will be completed and the mapping at scales of 1:200 000, 1:100 000, 1:50 000 and 1:25 000 will be continued. In accordance with the programme of the International Geophysical Year aeromagnetic mapping at a scale of 1:2 500 000 will be carried out of the Okhotsk Sea and for doing this work it is scheduled to increase the number of available aeromagnetometers to sixty in 1960 and to improve their design. Series manufacture of the aeromagnetometer АЭ-13 will begin in 1958; it will be supplemented with a variational station and calculating (computer?) apparatus for evaluating the magnetograms. Series production by 1960 is scheduled of nuclear resonance aeromagnetometers with a zero point of 0.1 γ/hr and an accuracy of ±1γ and of a magneto aerogradient meter.

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All Union Inter-Departmental Conference on aerial photography. (Cont.)

Much attention was paid to field aeromagnetic techniques. V. M. Rymanov (VNIIGeofizika), N. D. Palitsyn (Laboratory of Aerial Methods, Ac.Sc., U.S.S.R.), P. S. Cherepanov (VNIIGeofizika), S. V. Knorozov (Directorate of Aerial Photography GUGVF), Ya. G. Vorob'ev (Western Geophysical Trust), V. L. Sokolov and others have emphasized that the visual method of surveying is highly inaccurate and unsatisfactory owing to large longitudinal as well as transverse deflections of the aircraft from a given course and owing to the practical impossibility of verifying the accuracy of plotting the location of the aircraft by the navigator. Visual surveying is particularly unsatisfactory where landmarks are scarce (deserts, sea) and application of radio geodesy is necessary in these cases. According to V. L. Sokolov, VNIIGeofizika is working at present on introducing radio geodesy. V.Ye. Nikitskiy stated that Glavgeofizika and Glavneftegeofizika proposed introduction in 1957 of aerial photo-surveying. G. V. Romanovskiy (NII VTS SA), P. S. Cherepanov, V. D. Sokolov and others proposed supplementing topographical maps, particularly in sparsely inhabited regions, with photographic plans in

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All Union Inter-Departmental Conference on aerial photography. (Cont.)

isometric projection and particular importance was attached to photographic plans (maps) of the winter landscape. S. V. Knorozov, M. D. Konshin (TsNIIGAiK) and others mentioned that existing aeronavigational instruments and altitude meters do not satisfy requirements to be met by such instruments. Some of the speakers (P. A. Kukin - VNIIGeofizika, O. N. Solov'ev, Ya. G. Vorob'ev) dealt with the problem of surveying aeromagnetic observations. The role of large scale ground and aerial mapping was also discussed. V.Ye. Nikitskiy reported that Glavgeofizika proposes to develop during the next two to three years a method of aeromagnetic mapping at scales of 1:50 000 and 1:25 000. According to V. Ye. Nikitskiy, VSEGEI (with the participation of NIIZMIR and Glavgeofizika) will work out in 1957 unified technical specifications for compiling and publishing magnetic maps at scales of 1:1 000 000 and 1:200 000 and a technique of utilisation of aeromagnetic data in compiling and preparing for publication of geological maps. Geological maps at these scales are to be accompanied by appropriate maps of the magnetic field.

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All Union Inter-Departmental Conference on aerial photography. (Cont.)

V. P. Orlov demonstrated maps of the T and T_a fields of a scale of 1:2 500 000 compiled by NIIZMIR on the basis of data of absolute measurements and of relative aeromagnetic measurements up to and including 1954.

In numerous papers the problem was discussed of the state and further development of techniques of interpretation of aeromagnetic observations. A. A. Logachev and other speakers emphasized the important achievements of Soviet scientists in this field. Logachev considers as the most promising those methods of quantitative interpretation of magnetic anomalies which are based on utilising the higher derivatives of the potential. Logachev and Nikitskiy evaluated the average accuracy of calculation of depths at 15 to 20% but numerous other speakers doubted whether this high accuracy is really achieved.

V. Ye. Nikitskiy, Ya. G. Vorob'ev, O. N. Solov'ev, P. A. Kukin and others elucidated the problems of the geological structure of various regions according to aeromagnetic prospecting data. Much attention was paid to the use of aerial methods for other types of geophysical

All Union Inter-Departmental Conference on aerial photography. (Cont.)

prospecting: radio prospecting, gravimetric prospecting, electric prospecting, seismic prospecting. Except for magnetometric measurements, apparatus for measurement from aircraft is available only for radiometric measurements. In other methods aircraft are used only for transportation or delivery of the metering apparatus from one point of observation to another but even this has resulted in considerable economy and improved productivity of labour. Aerial methods proved very useful in line and point seismic sounding and in studying telluric currents. In 1956 VNIIGeofizika developed a method of field gravimetrical measurement for scales of 1:1 000 000 and 1:200 000 using helicopters. Aerial methods are particularly effective in regions with difficult access. Therefore, it is planned to use during the sixth Five Year Plan period aerial seismic and aerial electric prospecting in Western Siberia. Application of aerial methods necessitated the design of portable apparatus. Seismic prospecting and electric prospecting stations "CC-24 Shvedchikov" and "VNIIGeofizika" have been tested with very good results and the question has been raised of constructing gravimetric and electric

All Union Inter-Departmental Conference on aerial photography. (Cont.)

prospecting instruments for measuring during flight (V. L. Sokolov). N. D. Palitsyn, G.S. Smirnov (VIRG), A. N. Krasnov (VIRG), N. V. Kobets (Aerial Methods Laboratory Ac.Sc., U.S.S.R.) and Ye. E. Popova (Western Geophysical Trust) pointed out the necessity of using combined aerial methods. The task was assigned to VSEGEI of developing in 1957 techniques of combined geophysical investigations. In their papers, A. A. Logachev, V. L. Sokolov, S. V. Knorozov and others raised the question of organisation of aeromagnetic work and the economic effectiveness of such work. A resolution was adopted relating to the further development of aerial methods. Particularly, it was decided to create at the Aerial Methods Laboratory, Ac.Sc. an Inter-Departmental Commission for coordinating the scientific and practical activity of the individual establishments and to organise a photogrammetric society and a publication, to extend lecturing on aerial methods in teaching establishments, to adopt measures for more rapid introduction of radio-

Card 7/8 geodetic methods of evaluating aeromagnetic observations, to create a unified network covering the entire Soviet

49-3-16/16

All Union Inter-Departmental Conference on aerial photography. (Cont.)

Union for aeromagnetic surveying, etc.

(This is a complete translation and not an abstract).

AVAILABLE: Library of Congress

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DEVITSYN, V.M.

AUTHORS: Devitsyn, V. M. and Lapina, M. I. 49-10-7/10

TITLE: On the accuracy of determining the depths of location of disturbing masses studied on the example of the magnetic anomalies of Bashkiria. (O tochnosti opredeleniya glubin vozmushchayushchikh mass na primere magnitnykh anomaliy Bashkirii).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1957, No.10, pp. 1266-1272 (USSR)

ABSTRACT: The authors studied the problem of calculating the depth of disturbing masses on the basis of the magnetic anomalies of Bashkiria, applying the most simple methods of calculation used in practice for the purpose of determining the degree of agreement between the results of the calculations and evaluating the accuracy of the calculated depths. For the calculations the authors used a detailed ΔT map of the respective section produced on the basis of 1956 mapping work by Vniigeofizika, scale 1:200 000. It is concluded that depth values of disturbing masses calculated on the basis of ΔT magnetic anomaly maps, using current simple methods of calculation, yield only qualitative results. This is due to inadequate detail of the magnetic anomaly maps produced by aerial magnetic

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On the accuracy of determining the depths of location of disturbing masses studied on the example of the magnetic anomalies of Bashkiria).

mapping and also by the over-simplified assumptions relating to the physical and geological conditions on which these methods are based. Use of such methods is also difficult owing to the considerable influence of some other factors.
There are 5 figures, 1 table and 10 references, 9 of which are Slavic.

SUBMITTED: March 30, 1957.

ASSOCIATION: Ac.Sc. U.S.S.R. Institute of Physics of the Earth. (Akademiya Nauk SSSR Institut Fiziki Zemli).

AVAILABLE: Library of Congress

Card 2/2

DEVITSYN, V.M.; LAPINA, M.I.; SHNEYERSON, B.L.

Effect of inhomogeneous magnetization of a body of constant susceptibility on the results of magnetic anomaly interpretation by simple methods. Izv. AN SSR. Ser. geofiz. no. 3:428-432 Mr '61. (MIRA 14:2)

1. Institut fiziki Zemli AN SSSR.
(Shchigry Region--Magnetic prospecting)

DEVITSYN, V.M.

Numerical method for the analytic continuation of two-dimensional potential fields into the lower half-space. Part 1. Izv. AN SSSR. Ser. geofiz. no.9:1326-1338 S '64. (MIRA 17:10)

1. Institut fiziki zemli AN SSSR.

DEVITSKAYA, N.

Mechanical Drawing

History of Drafting, Znan. sila No. 2, 1952

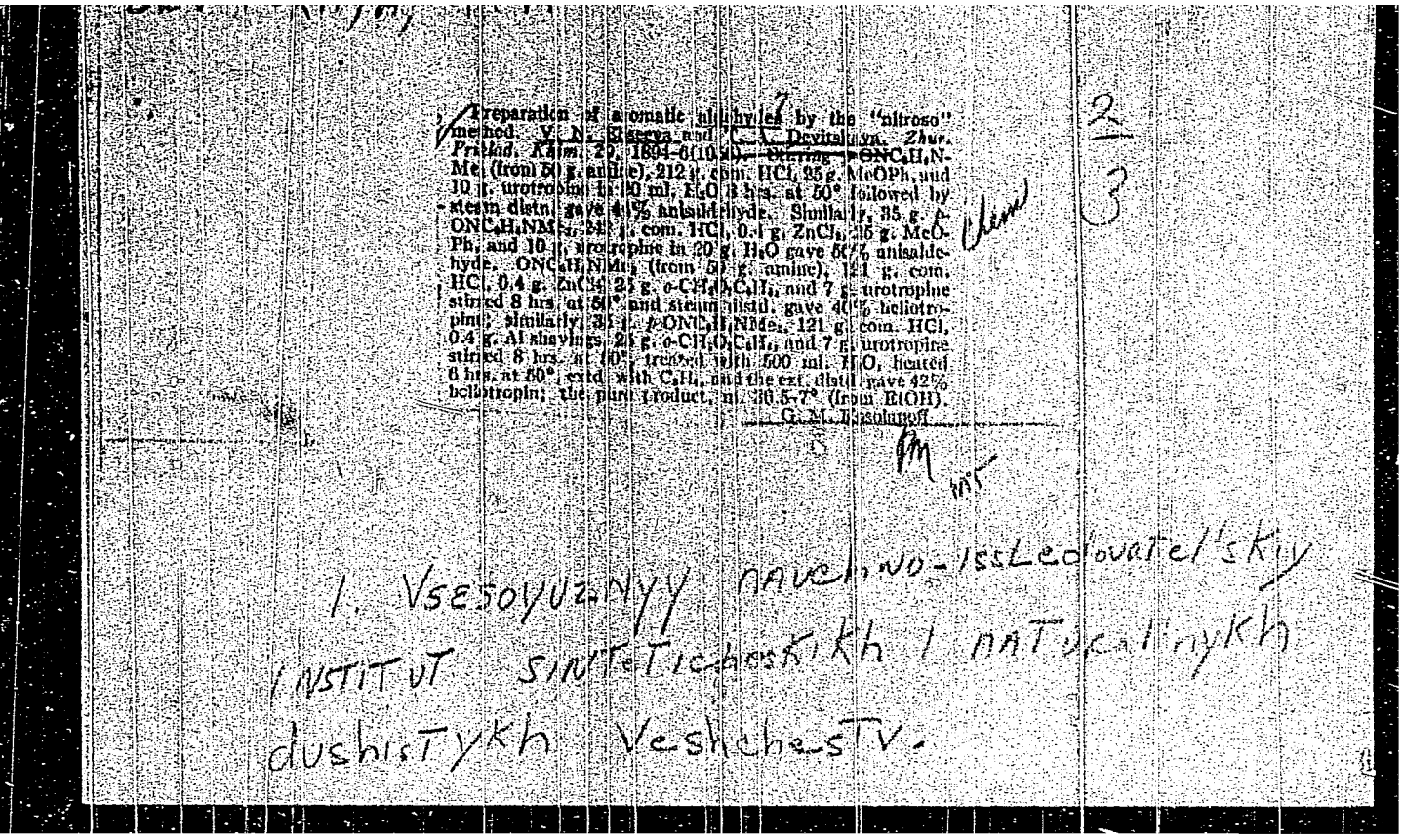
9. Monthly List of Russian Accessions, Library of Congress, July 1952 [illegible], Unclassified.

DEVITSKAYA T.A.

YELISEYEVA, V.N.; DEVITSKAYA, T.A.

Methylation of 1,2-dioxybenzene and its derivatives. Trudy VNIISKDV no.2:60-64 '54. (MLRA 10:7)

(Benzene) (Methylation)



Preparation of aromatic aldehydes by the "nitroso" method. V. N. Reserva and G. V. Devitsilova. *Zhur. Prikhd. Khim.* 29, 1894-6(1956).—Stirring 5 g. $ONC_6H_4NMe_2$ (from 5 g. amine), 212 g. conc. HCl, 25 g. MeOPh, and 10 g. urotropine in 40 ml. H_2O 3 hrs. at 50° followed by steam distn. gave 44% anisaldehyde. Similarly, 35 g. $ONC_6H_4NMe_2$, 212 g. conc. HCl, 0.4 g. $ZnCl_2$, 25 g. MeOPh, and 10 g. urotropine in 20 g. H_2O gave 50% anisaldehyde. $ONC_6H_4NMe_2$ (from 5 g. amine), 121 g. conc. HCl, 0.4 g. $ZnCl_2$, 25 g. o-$CH_3C_6H_4OC_6H_5$, and 7 g. urotropine stirred 8 hrs. at 50° and steam distd. gave 40% heliotropin; similarly, 35 g. p-$ONC_6H_4NMe_2$, 121 g. conc. HCl, 0.4 g. Al shavings, 25 g. o-$CH_3OC_6H_4$, and 7 g. urotropine stirred 8 hrs. at 40°, treated with 500 ml. H_2O, heated 6 hrs. at 50°, extd. with C_6H_6, and the ext. distd. gave 42% heliotropin; the pure product, m. 30.5-7° (from EtOH).

G. M. Kosolapoff

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskikh i natural'nykh dushistykh veshchestv.

YELISEYEVA, V.N.; DEVITSKAYA, T.A.

Synthesis of heliotropin from pyrocatechol through intermediate protocatechualdehyde. Trudy VNIISNDV no.4:31-34 '58. (MIRA 12:5)

(Piperonal) (Pyrocatechol)

LASKINA, Ye.D.; DEVITSKAYA, T.A.

Some reactions with methylene chloride carried out without using pressure in high-boiling solvents. Zhur.prikl.khim. 34 no.10: 2338-2341 O '61. (MIRA 14:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskikh i natural'nykh dushistykh veshchestv.
(Methane) (Pyrocatechol)

LASKINA, Ye.D.; DEVITSKAYA, T.A.; BYCHKOVA, Z.N.; SHILINA, R.F.; SUKHORUKOVA, T.V.

Preparation of heliotropin from the methylene ether of pyrocatechin and formaldehyde with the use of m-nitrobenzenesulfonic acid. Trudy VNIISNDV no.5:21-25 '61. (MIRA 14:10)
(Piperonal)

LASKINA, Ye.D.; DEVITSKAYA, T.A.; BELOV, V.N.

Synthesis of 3-hydroxy-4-ethoxy-1-propenylbenzene ("vanitrop") from pyrocatechol. Trudy VNIISNDV no.6:31-37 '63. (MIRA 17:4)

LASKINA, Ye.D., kand. khim. nauk; DEVITSKAYA, T.A.

Synthesis of piperonylpropanal. Masl.-zhir. prom. 29 no.5: 23-24 My '63. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskikh i natural'nykh dushistykh veshchestv.
(Perfumes, Synthetic) (Piperonal)

ABRAMOV, M.I.; BELIZIN, V.I.; DEVITSKIY, S.M.; ZATULA, V.I.; ZOLOTAREV, V.N.; ZOLOTAREV, I.S.; IL'INA, M.I.; KOLYSHKINA, N.S.; KUDASOV, L.P.; MAKHLIN, V.N.; MEDVEDEV, G.S.; NEKHAYEV, I.S.; OLEYNIKOV, M.S.; PARKHOMENKO, P.N.; TOMASHEVSKIY, V.I.; FEDUNETS, I.Kh.; KHRAMTSOV, V.K.; ZOLOTAREV, N.V., red.; SEVRYUKOV, P.A., tekhn.red.

[Planning on collective farms; manual] Planirovanie v kolkhozakh; spravochnik. Kursk, Kurskoe knizhnoe izd-vo, 1960. 437 p.
(MIRA 14:2)

(Collective farms)

DEVITSKIY, S.M.

Pulse crops in the fields of Kursk Province. Zemledelie 23 no.11: 37-39 N '61. (MIRA 14:12)

1. Glavnyy agronom Kurskogo oblastnogo upravleniya sel'skogo khozyaystva.

(Kursk Province--Leguminosae)

[illegible], V.M.

Numerical method for the analytic continuation of [illegible] dimensional potential fields. Part 2. Izv. AN [illegible] Fiz. no.11:1654-1673 N '64. [illegible]

1. Institut fiziki Zemli AN SSSR.

L 6306[illegible]-65 EWG(v)/EWT(1)/FCC Pe-5/Pg-4/Pi-4/Pq-4/Pq-4 GW

ACCESSION NR: AP5017041 UR/0387/65/000/004/0060/0072

550.838

AUTHORS: Strakhov, V. N.; Devitsyn, V. L.

TITLE: The reduction of observed values of potential fields to a single equation

SOURCE: AN SSSR. Izvestiya. Fizika zemli, no. 4, 1965, 60-72

TOPIC TAGS: computer programming, potential theory, gravitation field, magnetic field

ABSTRACT: The problem of reducing observations on "low" relief of potential anomalies--gravity or magnetic-- to a single horizontal plane in the lower half space is discussed. This approach leads to a simpler and more convenient solution, especially when using an electronic computer, than otherwise possible. It is assumed that some horizontal plane (z = 0) may be found between the actual surface of the earth (on which observations have been made at definite positions on a grid) and the disturbing bodies that create the anomalous field, whether magnetic or gravitational, described by a function for the external form of the bodies--U(x,y,z). The task of reducing the observed values of this function is considered a problem in analytical combination of the function on the plane that may be defined by z = 0. Two basic relations must be stated: 1) the sources of the field (disturbing bodies)

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L 63062-65
ACCESSION NR: AP5017041

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are placed in empty space, and 2) the horizontal plane is assumed to lie such that the sources of the field are entirely below it and the earth's surface is entirely above. A two-dimensional field is considered first, because of greater simplicity, and the results are modified for the three-dimensional case. A computer program is set up, and all the operators are defined. Theoretical results are compared with observational data for the Kursk magnetic anomaly. It is found that the elimination of even small systematic distortions due to "low" relief may lead to more reliable discrimination of the effect of a thin bed or of a weakly magnetized bed. This is illustrated by data on the oxidized quartzites at the Kursk magnetic anomaly. Orig. art. has: 2 figures, 4 tables, and 19 formulas.

ASSOCIATION: Akademiya nauk SSSR, Institut fiziki Zemli (Academy of Sciences SSSR, Institute of Terrestrial Physics)

SUBMITTED: 14Feb64 ENCL: 00 SUB CODE: ES, DP

NO REF SOV: 000 OTHER: 000

Card 2/2

S/119/63/000/002/011/014
A004/A127

AUTHORS: Devitsyn, Ye.D., Ivanov, P.A., Krutogolov, V.D.

TITLE: Automatic EVM-60 AT (EVI-60AT) electric viscometer for viscosity measurements in the flow

PERIODICAL: Priborostroyeniye, no. 2, 1963, 27

TEXT: The EVI-60AT electric viscometer, developed at the Issledovatel'skiy fiziko-tekhnicheskiy institut (Physico-Technical Research Institute) of the Gor'kiy State University im. N.I. Gorbachevskiy is based on the principle of converting the viscosity magnitude into electric voltage. The phase of this voltage varies in proportion to the viscosity measured. The mentioned voltage is fed to the arm of a semi-balanced bridge whose output voltage is fed to a phasesensitive detector and further, for recording, to the input of an automatic potentiometer. An automatic zero correction is provided for in fixed time intervals. The device is intended for viscosity measurements in the range of 0 - 1, 0 - 10, 0 - 20 poise at temperatures in the working chamber of up to 100°C. The relative error of the viscometer does not exceed 2%

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over all the measurement ranges. The author gives a detailed description of the viscometer units, design characteristics and functioning and present the EVI-60AT viscometer block diagram. There are 2 figures.

DEVITSYN, Ye.D.; IVANOV, P.A.; KRUTOGOLOV, V.D.

The EVI-60AT automatic electric viscosimeter for measuring viscosity in a flow. Priborostroenie no.2:27 F '63. (MIRA 16:5)
(Viscosimeter)

DEVITSYN, Ye.D., inzh.; IVANOV, P.A., inzh.; KRUTOGOLOV, V.D., inzh.; EYGINGORIN, M.Ya., inzh.

Equipment for automatic reception of the fundamental information on production. Mekh.i avtom.proizv. 17 no.9:42-44 S '63. (MIRA 16:10)

DEVISOROVA, A. S., Cand Med Sci -- "~~Protracted labor~~ Prolonged pregnancy (a clinical morphological study)." Omsk, 1961. (Min of Health RSFSR. Omsk State Med Inst im M. I. Kalinin) (KL, 3-61, 260)

DEVIZOROVA, A.S., assistent

Clinical aspects and outcome of labor in prolonged pregnancy.
Vop. okh. mat. i det. 6 no.7:73-76 Jl '61. (MIRA 14:8)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.E.Gillerson) Omskogo meditsinskogo instituta imeni M.I.Kalinina.
(PREGNANCY, PROTRACTED)

ANUFRIYENKO, V.B.; DEVKIN, B.V.; KOTEL'NIKOVA, G.V.; KULABUKHOV, Yu.S.; LOVCHIKOVA, G.N.; SAL'NIKOV, O.A.; TIMOKHIN, L.A.; TRUBNIKOV, V.R.; FETISOV, N.I.

Inelastic scattering of 14 Mev. neutrons and the nuclear level density. IAd. fiz. 2 no.5:826-838 N '65.

(MIRA 18:12)

L 20720-66 EWT(l)/EWT(m)/ETC(m)-6 DIAAP/IJP(c) WW
ACC NR: AP6007812 SOURCE CODE: UR/0120/66/000/001/0053/0061

AUTHOR: Anufriyenko, V. B.; Devkin, B. V.; Ivanov, A. A. Kotel'nikova, G. V.; Kulabukhov, Yu. S.; Lovchikova, G. N.; Sal'nikov, O. A.; Timokhin, L. A.; Fetisov, N. I.

ORG: Institute of Physics and Power Engineering, GKAE (Fiziko-energeticheskiy institut GKAE)

TITLE: Neutron transit-time spectrometer

SOURCE: Pribory i tekhnika eksperimenta, no. 1, 1966, 53-61

TOPIC TAGS: spectrometer, neutron spectrometer

ABSTRACT: A new fast-neutron transit-time spectrometer is described which can measure a neutron spectrum from 100 kev to 14 Mev. Monochromatic 14-Mev neutrons are produced by a $T^3(d, n)He^4$ reaction; deuteron energy, 250 kev; deuteron-pulse duration, 7 nsec; beam interruption before acceleration is used (sketch supplied). The neutron detector and electronic equipment are briefly described. The spectrometer resolution determined from a δ-peak is 4 nsec/m; channel width, 2.12 nsec; integral nonlinearity, 0.25%. From a time-to-pulse-height converter, the signals are fed to a 256-channel analyzer. The resolution time is 8 nsec; transit base, 2 m; linear dynamic range, 400 nsec. The photomultiplier is equipped with a noise-elimination device, and the detector is well protected from the background noise,

Card 1/2 UDC: 539.1.078:539.125.5

L 20720-66

ACC NR: AP6007812

both features ensuring a high effect-to-background ratio when 100-kev neutrons are measured. The spectrometer operation is illustrated by a spectrum of neutrons inelastically scattered by Mn."In conclusion, the authors wish to thank B. S. Novikovskiy and Ye. P. Ukraintseva for tending the accelerator operation, V. G. Zolotukhin for discussing the spectrometer efficiency, and N. S. Biryukov, M. D. Rityutskaya, V. A. Rumyantseva, A. M. Trufanov, and Ye. S. Chernichenko for their part in measurements and data processing." Orig. art. has: 9 figures and 3 formulas. [03]

SUB CODE: 18, 09 / SUBM DATE: 11Jan65 / ORIG REF: 004 / OTH REF 006/ ATD PRESS: 4223

Card 2/2

L 36074-66 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AT6015891 SOURCE CODE: UR/3150/65/000/030/0002/0018

AUTHOR: Sal'nikov, O. A.; Fetisov, N. I.; Lovchikova, G. N.; Kotel'nikova, G. V.; Anufriyenko, V. B.; Devkin, B. V.

ORG: Physico-energetic Institute (Fiziko-energeticheskiy institut)

TITLE: Nuclear level density and spectral distribution of inelastically scattered neutrons of 14.1 Mev initial energy

SOURCE: Obninsk. Fiziko-energeticheskiy institut. Doklady, FEI-30, 1965. Spektry neuprugo rasseyannykh neytronov s nachal'noy energiyey 14, 1 Mev i plotnost' yadernykh urovney, 2-18

TOPIC TAGS: neutron scattering, nuclear energy level, neutron spectrum, excitation energy, Fermi gas

ABSTRACT: The purpose of this work is to obtain a better representation of the functional dependence of the temperature of nuclei and the nuclear level density parameters on the mass number A, the reaction (n,n') and the neutron spectrum in the reaction $(n,2n)$. The measured values of the nuclear level density parameters a, a' and a'' are presented in tabular form. In addition, a table gives the calculated values of the temperature T_N and T_1, according to the Fermi model of the nucleus. The spectra of the secondary neutrons in the reaction $(n,2n)$ were calculated using the equation

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L 36074-66

ACC NR: AT6015891

$$N(E) = \text{const. } E \exp(-E/T_N)$$

All above measurements were evaluated for 14 target nuclei: Be, Na, Mg, S, K, Ca, Sr, Tn, Sb, J, Cs, Ce, Ta, Hg. Conclusion: (a) The linear dependence of $\ln(N/E)$ on E shows that the scattering represents 80% of the reaction with the formation of the compound nucleus. Further, the direct interaction plays an essential role in the case of neutrons with small transfer momentum in the scattering. (b) The observed change in the temperature of nuclei with the excitation energy agrees well with the Fermi gas model in the region from 2 to 10 Mev. The same applies to the temperature change with the mass number A. (c) An increase in the level density is observed as a function of the mass number A, except for nuclei near those with closed shells. Orig. art. has: 10 figures, 3 tables, 7 formulas.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 013

Card 2/2

DEVKIN, M. M.

Issledovanie poperechnoi ustoichivosti gidrosamoleta na vode pri bokovom vetre. (TSAGI. Trudy, 1934, no. 166, p. 3-43, illus., diagrs., bibliography)

Summary in English.

Title tr.: Research in lateral stability of seaplanes on water under a side wind.

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

DEVKIN, M.

DEVKIN, M. S.

Issledovanie zatenenniia operenniia gidrosamoleta letaiushchei lodkoi. (TSAGI. Trudy, 1934, no. 166, p. 45-90, tables, diagrs., bibliography)

Summary in English.

Title tr.: Investigation of the blanketing effect of a hull of a flying boat wing.

QA911.R65 no. 166

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

SEVOST'YANOV, N.D., inzhener; DEVKIN, M.M., inzhener.

Sandblast nozzle design. Lit. proizv. no.3:27-29 Mr '57.
(Nozzles) (Sandblast) (MLRA 10:4)

VASILISKOVA, A.I.; DEVKIN, M.M.

Cleaning aluminum and magnesium alloy castings with aluminum sand. Alium. splavy no.1:226-229 '63. (MIRA 16:11)

DEVKINA, P. S.

Refractory Materials

Production of Steel pouring equipment from a mixture of grogs - D. S. Rutman and others.
Ogneupory 17 No. 1, 1952
Sherbinskiy Zavod Ogneuporov

SO: Monthly List of Russian Accessions, Library of Congress, _____1953, Uncl.

DEVLETKIL'DEYEVA, A.Z., dotsent; KARIMOVA, Z.Kh., dotsent

Clinical aspects of Kazan leptospirosis. Kaz. med. zhur. no. 4:3-8 Jl-Ag '60. (MIRA 13:8)
(KAZAN--LEPTOSPIROSIS)

LOPATIN, N.A., inzh.; KOGNOVITSKAYA, O.S., inzh.; BULGAKOV, M.I., inzh.; DEVLIKAMOV, A.G., inzh.; PLATONOV, V.A., inzh., retsenzent; ROZINOYER, S.T., inzh., nauchnyy red.; NEPOROZHNYAYA, G.P., red.; SOKOL'SKIY, I.F., tekhn.red.

[Hydraulic mechanization in the construction of the Volga Hydroelectric Power Station (22d Congress of the CPSU)] Gidromekhanizatsiia na stroitel'stve Volzhskoi GES im. XXII s"ezda KPSS. Moskva, Gidroproekt, 1962. 172 p. (MIRA 16:6)

(Volga Hydroelectric Power Station (22d Congress of the CPSU))
(Hydraulic machinery)

DEVLIKAMOV, V. V. (Grad Stud)

Dissertation: "The Influence of Clay on the Absorptive Power of Pressure Wells." Cand Tech Sci, Moscow Order of the Labor Red Banner Petroleum Inst imeni I. M. Gubkin, 29 Jun 54. (Vechernyaya Moskva, Moscow, 18 Jun 54)

SO: SUM 318, 23 Dec 1954

DEVLIKAMOV, V.V.; SUKHANOV, G.N.; BUL'CHUK, D.D.

Increasing oil recovery by means of electroosmosis. Izv. vys. ucheb. zav.; neft' i gaz no.8:63-67 '58. (MIRA 11:10)

1.Ufimskiy neftyanoy institut.
(Electroosmosis)

DEVLIKAMOV, V.V.; SUKHANOV, G.N.; BUL'CHUK, D.D.

Calculation of oil recovery in flooding according to reservoir thicknesses. Izv. vys. ucheb. zav.; neft' i gaz 3 no.8:53-57 '60. (MIRA 14:4)

1. Ufimskiy neftyanoy institut.
(Oil field flooding)

LAZAREV, V.N. (Ufa); DEVLIKAMOV, V.V. (Ufa); YAKUBOV, A.A. (Baku); KHARITONOV, M.F. (Baku)

Concerning the book by M.A. Zhdanov "Petroleum geology."
Izv. vys. ucheb. zav.; neft' i gaz 6 no.8:110-112 '63.
(MIRA 17:6)

DEVLIKAMOV, V.V.; DUNYUSHKIN, I.I.; SHROTT, K.G.

Photocolorimetry of the oils of the Kuchmureva group of oil fields of the Oil Field Administration of the "Chernushka" Petroleum Trust. Izv. vys. ucheb. zav.; neft' i gaz 7 no.6:33-37 '64. (MIRA 17:9)

1. Ufimskiy neftyanoy institut.

BUL'CHUK, D.D.; DEVLIKAMOV, V.V.

Super-saturated oil phenomena. Izv. vys. ucheb. zav.; neft' i gaz 8 no.4:37-39 '65. (MIRA 18:5)

1. Ufimskiy neftyanoy institut.

BABALYAN, G.; DEVLIKAMOV, V.

Reviews and bibliography. Neft. khoz. 43 no.8:71 Ag '65.
(MIRA 18:12)

DEVLIKAMOV, V.V.; VYGODSKIY, Ya.M.; MALYAREVICH, V.S.

Determining the level of mercury in the steel tubes of a differential manometer at high static pressures. Neftepram. delo no.6:28-29 '65. (MIRA 18:10)

1. Ufimskiy neftyanoy institut.

DEVLISHEV, P.

Improving the tactical training of administrative personnel.
Pozh.delo 6 no.9:17-18 S '60. (MIRA 13:9)
(Fire extinction--Study and teaching)

YEMEL'YANOV, Arkadiy Stepanovich; DEVLISHEV, P.P., red.; RACHEVSKAYA, M.I., red. izd-va; KHENOKH, E.M., tekhn. red.

[Fire extinction techniques illustrated with examples] Pozharnaia taktika v primerakh. Moskva, Izd-vo M-va kommun. khoz. RSFSR, 1962. 257 p. (MIRA 16:5)
(Fire extinction)

RODYAKIN, N.F., prof.; DVURECHENSKAYA, K.V.; DEVLISHEVA, I.V., red.

[Cutaneous leisamoniasis (Borovskii's disease); a bibliographic index to the literature, 1862-1960 gg. Ashkhabad, Respublikanskaia nauchnaia med. biblioteka, 1962. 133 p. (MIRA 15:12)
(DELHI BOIL)

DEVNIN, S.I., kand.tekhn.nauk

Course stability of ships equipped with water-jet propellers. Sudostroenie 25 no.2:11-12 F '59. (MIRA 12:4)
(Stability of ships)

DEVNIN, S.I., kand.tekhn.nauk; [illegible], I.M., inzh.

Efficient location of the rudder in the race of a heavily loaded propeller. Sudostroenie 27 no.7:13-15 Jl '61. (MIRA 14:11)

(Steering gear)
(Propellers)

S/170/62/005/002/007/009
B104/B138

AUTHOR: Devnin, S. I.

TITLE: Oscillations of a cylindrical console in a stream of liquid

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 2, 1962, 97 - 100

TEXT: Transverse oscillations of long cylindrical consoles ($L/d \geq 25$), produced by periodic separation of vortices, have been studied. The well-known anharmonic forces acting on such a console are approximated by a harmonic force: $Y = Y_o \sin pt$, where $Y_o = 1.14Y^*$; Y^* is the actual amplitude of the force; and p is the cyclic frequency of vortex separation. The forces acting on the free end of the cylinder are given by $Y_o = 0.46c_y \rho dLv^2/2$, where c_y is a dimensionless coefficient of the transverse forces; ρ is the density of the liquid; d is the diameter of the cylinder; L is its length; and v is the velocity of the undisturbed flow. c_y and the drag coefficient c_x are regarded as linear functions of the

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APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310006-6"

oscillation amplitudes. The elastic forces are calculated according to Hooke's law. Thus, the transverse oscillations of the free end of the console can be described by

$$\ddot{y} + 2\delta_1 \dot{y} + 2\delta_{\text{II}} \dot{y}^3 + \omega_0^2 y = P_0 \sin pt,$$

$$2\delta_1 = \frac{0{,}25 \frac{\rho d}{2} Lv}{M_{\text{пр}}} c_x; \qquad (6)$$

(7)

where $M_{\text{пр}}$ is the sum of the cylinder's mass and the mass of the attached liquid reduced to the free end of the cylinder. The cylindrical console is an almost harmonic dynamic system. As the flow velocity rises the non-linearity of the system diminishes and, at the same time, the disturbing forces grow more rapidly than the damping forces. The system has pronounced resonance properties. The resonance value of the dimensionless transverse oscillation amplitude of the free end of the console is inversely proportional to the Strouhal number of resonant oscillations. The results were confirmed by experiemnts. There are 2 figures and 7

S/170/62/005/002/007/009
B104/B138

Oscillations of a ...

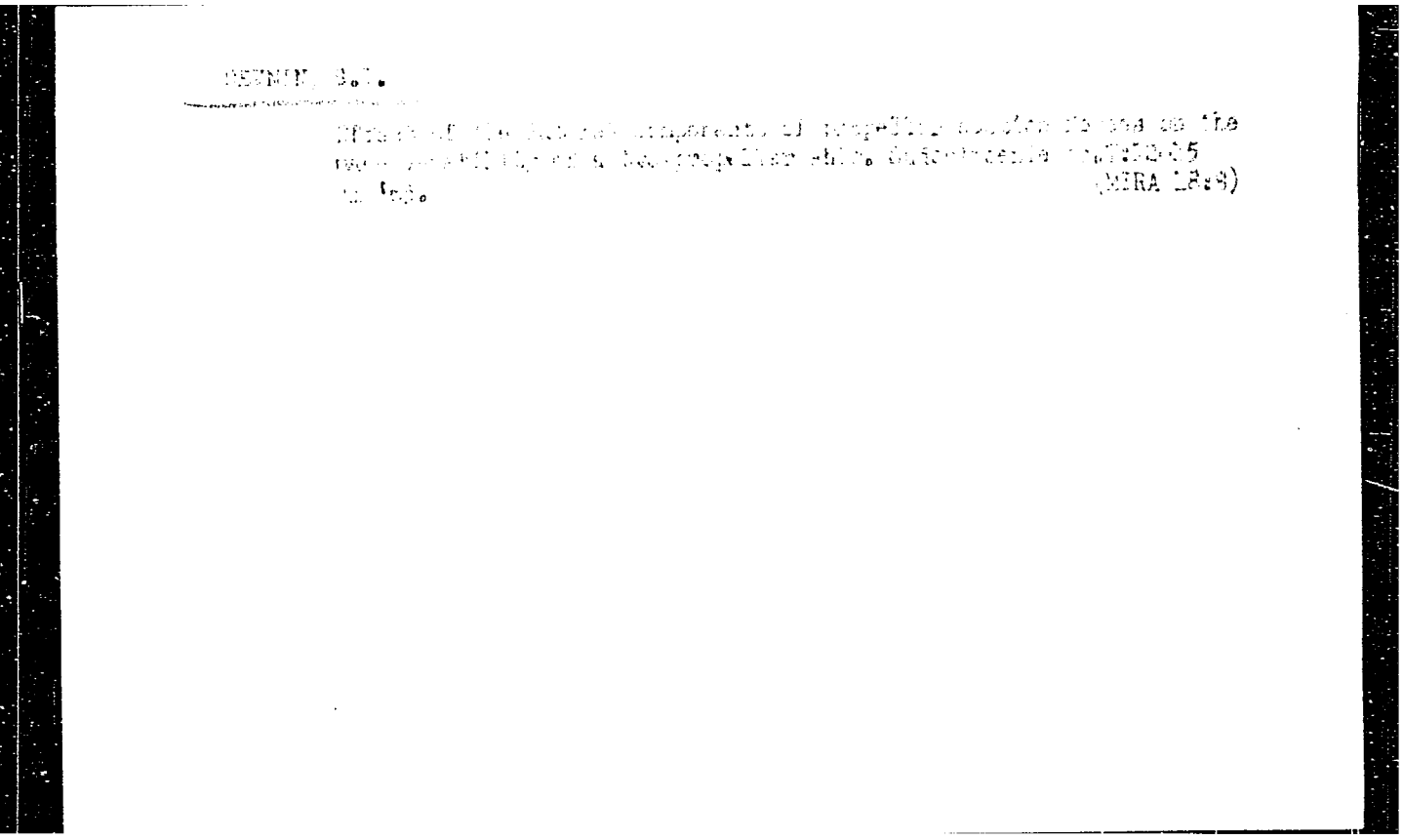
references: 6 Soviet and 1 non-Soviet.

SUBMITTED: May 5, 1961

Card 3/3

DEVNIN, S.I., kand.tekhn.nauk; TIMOFEYEV, V.V., inzh.

Calculating the forces acting on the propeller of a twin-screw vessel. Sudostroenie 28 no.2:17-19 F '62. (MIRA 15:3)
(Ship propulsion)



(MIRA 12:8)

ANDRONIKASHVILI, E.L., akademik; BUDA, B.G.; DEVNOZASHVILI, D.S.; KIKNADZE, G.I.; KITSMARISHVILI, E.S.; TOPSHYAN, L.S.; CHANTURIYA, V.M.

Low-temperature loop of an IRT-2000 reactor. Soob. AN Gruz. SSR 34 no.1:45-52 Ap'64 (MIRA 17:7)

1. AN Gruzinskoy SSR (for Andronikashvili).

DEVOCHKIN, Fedor Aleksandrovich, kand. sel'khoz.nauk; VASIL'YEVA, Ye., red.; SHLYK, M., tekhn. red.

[Direct-seeded cabbage] Gruntovaia kapusta. Moskva, Mosk. rabochii, 1961. 21 p. (MIRA 14:12)

(Cabbage)

Name	:	DEVOCHKIN, F. A.
Dissertation	:	Growing onion sets and bulbs as annuals under protective paper
Degree	:	Cand Agri Sci
Defended At	:	Moscow Order of Lenin Agricultural Inst imeni K. A. Timiryazev
Publication Date, Place	:	1956, Moscow
Source	:	Knizhnaya Letopis' No 5, 1957

USSR/Cultivated Plants - Potatoes. Vegetables. Melons. etc. M.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15647

Author : F.A. Devochkin

Inst :

Title : Raising One Year Onion Buds and Bulbils with Germination Protective Paper.
(Vyrashchivaniye luka-sevka i luka-repki pri odnoletney kul'ture s primeneniyem vskhodozashchitnoy bumagi).

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K.A. Timiryazeva, 1957, vyp. 28, 332-337.

Abstract : At the Vegetable Testing Station of the Moscow "Order of Lenin" Agricultural Academy im. K.A. Timiryazev when onions were planted on germination protective paper, one observed a reduced amount of weeds, improved soil temperature and water conditions, a sharp increase in the quantity of nitrifying bacteria (up to 10,000 per 1 gram of soil), nitrogen appearing increasedly in

Card 1/2

DEVOCHKIN F.A.

CATEGORY : Cultivated Plants. Potatoes. Vegetables. Cucurbits.

ABS. JOUR. : [illegible], 1959, No. 42738

AUTHOR : Devochkin, F.A.

INST. : Moscow Agric.Acad.im.K.A.Timiryazev

TITLE : Selecting the Planting Arrangement for the Garden Onion Using Strips of Sprout Protection Paper.

ORIG. PUB. : Doklady Mosk. s.-kh. akad. im. K.A. Timiryazeva, 1958, vyp. 32, 149-152

ABSTRACT : No Abstract

CARD : 1/1

DEVOCHKIN, F.A., kand. sel'skokh. nauk, dotsent; DIANOV, V.I., aspirant; EDEL'SHTEYN, V.I., pochetnyy akademik, nauchnyy rukovoditel'

Cotton plants in sowing under paper strips. Izv. TSKHA no.1: 7-11 '63. (MIRA 16:7)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk Imeni Lenina (for Edel'shteyn).
(Cotton growing) (Mulching)

L 07448-67
ACC NR: AP6035875 SOURCE CODE: UR/0413/66/000/020/0097/0097

AUTHOR: Lube, V. M.; Safonov, Yu. D.; Yakimenko, L. I.; Devochkin, I. V.; Donets, A. M.

24
B

ORG: none

TITLE: Device for studying cardiac activity. 22 Class 30, no. 187215

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 97

TOPIC TAGS: human physiology, cardiovascular system, bioinstrumentation

ABSTRACT: An Author Certificate has been issued for a device for studying cardiac activity consisting of an ultrasonic generator, a piezoelectric sensor with con-

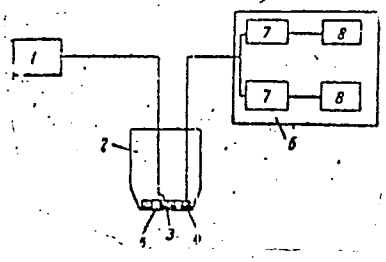


Fig. 1. A device for studying cardiac activity

1 - Ultrasonic generator; 2 - piezoelectric sensor; 3 - transmitting unit; 4 - receiving unit; 5 - annular gap; 6 - ultrasonic receiver; 7 - filters; 8 - recorders.

Card 1/2 UDC: 615.47:612.171.1

L 07448-67

ACC NR: AP6035875

centric transmitting and receiving units, and an ultrasonic receiver with a selection system and recorder (see Fig. 1). The selection system includes two filters at different frequencies for recording the character of cardiac muscle and heart valve movements. To increase sensitivity the concentric receiving and transmitting elements of the piezoelectric sensor are separated by an annular gap. Orig. art. has: 1 figure.

SUB CODE: 06, 14/ SUBM DATE: 15Apr65/ ATD PRESS: 5104

Card 2/2

RASKHODOV, Grigoriy Fedorovich, prof.; MELIKHOV, Alekcey Stepanovich; DEVOCHKIN, N., red.

[Intercollective farm chick house] Mezhkolkhoznyi tsypliatnik. Volgograd, Volgogradskoe knizhnoe izd-vo, 1963. 21 p.

1. Volgogradskiy sel'skokhozyaystvennyy institut, Mikhaylovskiy rayon (for Raskhodov). 2. Direktor Mikhaylovskoy inkubatorno-ptitsevodcheskoy stantsii, Mikhaylovskiy rayon (for Melikhov).

PUSTOVOY, Ivan Vasil'yevich, dots.; DEVOCHKIN, N., red.

[Fertilizers and crop yields] Udobrenie i urozhai. Volgograd, Nizhne-Volzhskoe knizhnoe izd-vo, 1964. 40 p. (MIRA 18:3)

1. Volgogradskiy sel'skokhozyaystvennyy institut (for Pustovoy).

DEVOCHKIN, N., red.

[Knowledge increases wealth; from practices in the preparation of feeds on farms of the province] Umenie bogatstvo mnozhit; iz opyta prigotovleniia kormov v khoziaistvakh oblasti. Volgograd, Nizhne-Volzhskoe izd-vo, 1964. 42 p. (MIRA 18:2)

KONUROV, S.G., dots.; DEVOCHKIN, N.I., red.

[Fertility of ordinary Chernozem soil] Plodorodie obyknovennogo chernozema. Volgograd, Volgogradskii sel'khozinstitut, 1962. 121 p. (MIRA 18:2)

LIKHOLAY, Vladimir Georgiyevich; SKOROKHODOV, Grigoriy Fedorovich; DEVOCHKIN, N., red.

[Toward the goals of abundance] K rubezham izobiliia. Volgograd, Volgogradskoe knizhnoe izd-vo, 1963. 38 p. (MIRA 18:3)

BUKAYEV, Veniamin Ivanovich; NASONOV, Vasiliy Nikitovich; SKAKUNOV, Nikolay Vasil'yevich; DEVOCHKIN, N., red.

[Contribution of rural efficiency promoters to production] Sel'skie ratsionalizatory - proizvodstvu. Volgograd, Volgogradskoe knizhnoe izd-vo, 1963. 98 p. (MIRA 18:3)

DENISOV, Grigoriy Arsent'yevich; SOPOV, Grigoriy Khristoforovich; SHEREMET, Leonid Davidovich; DEVOCHKIN, N.I., red.

[The "Krep'" state farm] Sovkhoz "Krep'", Volgograd, Nizhne-Volzhskoe knizhnoe izd-vo, 1964. 39 p. (MIRA 18:2)

AGAPOV, Pavel Fedorovich, dots.; DEVOCHKIN, N.I., red.

[Seeding rates for grain crops] Normy vyseva zernovykh. Volgograd, Nizhne-Volzhskoe knizhnoe izd-vo, 1964. 100 p. (MIRA 18:3)

1. Volgogradskiy sel'skokhozyaystvennyy institut (for Agapov).

GODUNOV, Yuriy Nikolayevich; GRACHEV, Aleksey Gavrilovich; KALASHNIKOV, Anatoliy Fedorovich; KOLESNIKOV, Aleksandr Sergeyevich; DEVOCHKIN, N.I., red.

[The greenbelt; practices in the establishment of park forest plantations and orchards around Volgograd] Zelenoe kol'tso; opyt sozdaniia lesoparkovykh nasazhdenii i sadov vokrug Volgograda. Volgograd, Nizhne-Volzhskoe knizhnoe izd-vo, 1964. 100 p. (MIRA 18:3)

KOTSARENKO, Nikolay Vasil'yevich; DEVOCHKIN, N.I., red.

[The most inexpensive meat] Samoe deshevoe miaso. Volgograd, Nizhne-Volzhskoe knizhnoe izd-vo, 1965. 18 p. (MIRA 18:3)

1. Glavnyy zootekhnik sovkhoza "Romashkovskiy" Pallasovskogo proizvodstvennogo upravleniya, Pallasovskiy rayon (for Kotsarenko).

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AUTHOR: De Vödrös, D.

TITLE: Radioactive isotopes in aluminum metallurgy

PERIODICAL: Metalurgia şi Construcţia de Maşini, no. 11, 1960, 1,037 - 1,038

TEXT: This is the translation of an article published in the Hungarian periodical "Kohászati Lapok", no. 4, 1959. The article reviews a new method for the determination of molten aluminum in the electrolytic furnace by radioactive isotopes. The determination is accomplished as follows: a certain amount of artificial radioactive isotope is added to the molten aluminum in the electrolytic furnace; after uniform mixing, a sample of molten aluminum is taken out; the quantity of the molten aluminum is determined on the basis of the specific activity reduction of the sample, by using the relation: $m = m_o \frac{S_o}{S}$, in which m_o is the weight of the sample introduced into the electrolytic furnace, S_o - the specific activity of the sample before being introduced into the electrolytic furnace, and S - the specific activity of the sample after dilution. Investigations have been done in five steps: 1) Checking of the uniform distribution of the radioactive isotope in the metal bath. The checking was accomplished in a labora-

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tory electrolytic furnace, 500 mm long, 60 mm wide and 100 mm deep, heated to 900°C. An aluminum capsule, 1.5 mm in diameter and 40 mm long, containing a very small quantity of radioactive isotope was introduced at one end of the furnace. After 15 min, a 2 cm^3 sample was taken out at the other end. This procedure was repeated every 10 min. The samples were rolled to a 0.5 mm thickness and cut into discs with a 20-mm diameter. The quantity of radioactivity was measured by a GM-counter. The radioactivity increased from sample to sample. A uniform distribution was attained within 25 - 30 min. 2) Selection of the radioactive isotope and determination of the isotope quantity introduced in the molten aluminum: during the first investigations Fe^{59} with a half-life of 46 days was used, whereas in later experiments Au^{198} with a half-life of 2.65 days was used. The latter proved to be more advantageous. A quantity of 1.5 mCu active substance supplied samples which could be well measured, even after dilution. 3) Introduction of the radioactive isotope into the prealloy: aluminum was alloyed with the active substance as described by using a graphite crucible. The Fe-Al prealloy was poured into cast iron molds. After measuring weight and activity of the samples, the autoradiogram of every sample has been established. 4) Measuring of the specific activity of the samples and calculation of the quantity of the molten aluminum: an absorbing screen was introduced between sample and counter. The prepared sam-

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ples were introduced into the electrolyte furnace, being wrapped in paper to avoid a deposition of cryolite on the surface of the radioactive cylinder. The samples were introduced in 2 to 4 diagonally disposed places. A homogeneous mixture was obtained after 1 - 1.5 h. 5) Performance of some checking tests by weighing the content of some crucibles: the molten Al was tapped every 48 h, casting 800 - 1,000 kg of molten metal into a ladle, pouring then the cast Al into a homogenizing furnace, in which several aluminum charges were mixed, to form a single quality. Thus, the quantity of the traced Al increased 10 times, whereas the specific activity dropped correspondingly. The quantity of the molten aluminum could be established with an accuracy of 1%. There are 5 figures.

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DEVONISSKIY, Viktor Yul'yevich; PERETRUKHINA, G.F., red.

[Germanium diode rectifiers] Vypriamiteli na germanievykh diodakh. Moskva, Voenizdat, 1964. 183 p. (MIRA 17:5)

DEVONISSKIY, V., inzh.

Electronic voltage regulators. Tekh. i vooruzh. no.1:30-33 Ja '64.
(MIRA 17:6)

DEVOTCHENKO, F.S., tekhnik

Calculation of conductors in the repair of electric motors.
Energetik 13 no.5:14-16 My '65. (MIRA 18:8)

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AUTHOR: Devoyno, A.N.

TITLE: An investigation of heat exchange in a vacuum

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.11, 1961, 1, abstract 11G 5. (Tr. In-ta energ. AN BSSR, no.11, 1960, 31-39)

TEXT: An experimental study was made of the heat-transfer coefficient as a function of pressure and temperature for thermistor TCT-0.5 (TST-0.5) in the pressure range from 0.01 mm Hg up to atmospheric, at temperatures up to 250 °C. It was found that as the pressure was reduced to 50 mm Hg, heat transfer of the heated body diminished because of impaired convection. In the pressure range 50 - 0.2 mm Hg, the heat-transfer coefficient is practically constant because in this region heat transfer depends mainly on the thermal conductivity of the gas which does not depend on the pressure. With further reduction in pressure, the thermal conductivity remains constant but the heat-transfer coefficient again begins to fall. The reason is the appearance

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